



UNC

ENVIRONMENTAL FINANCE CENTER

2003 Annual Report of the Environmental Finance Center Network

Region 4 - The University of North Carolina at Chapel Hill

The University of North Carolina was established in 1998 and is one of two EFCs in Region 4. The EFC serves the states of Kentucky, Tennessee, Mississippi, Alabama, Florida, Georgia, South Carolina, and North Carolina.

Introduction

The Environmental Finance Center at the University of North Carolina at Chapel Hill (UNC EFC) works with local communities and government agencies throughout EPA's region 4 to address environmental management challenges by developing innovative financial management and environmental policy strategies and systems.

The UNC EFC assists communities by *“providing a bridge between students and faculty in the university who work principally on environmental financing, management and planning tools, and the governments and businesses whose job it is to use those tools for the public interest.”*

The UNC Environmental Finance Center is one of a group of university-based centers that concentrate on problems in the financing of environmental services. The U.S. Environmental Protection Agency originally established the centers in order to bring the work of researchers in the universities directly to bear on local environmental problems. The UNC EFC was begun in 1998 as a joint venture between the Institute of Government and the Office of Economic Development, both at UNC-Chapel Hill. Faculty and students working with the UNC EFC concentrate on helping improve the financing and delivery of environmental goods and services by local governments.

The UNC EFC receives its core support from the United States Environmental Protection Agency and the University of North Carolina at Chapel Hill.

Accomplishments

Training

The UNC EFC primarily reaches local communities through the delivery of interactive applied training programs and technical assistance. The UNC EFC sees one of its major roles as increasing the capacity of other organizations to address the financial aspects of environmental protection. For this reason and to support the leveraging of resources, the UNC EFC does most of its training in a collaborative manner – partnering with established organizations that have environmental, but not necessarily financial expertise.

Major training activities carried out in 2003 are listed below:

Management of On-site Wastewater Treatment Systems. As much as 50% of North Carolina’s population depends on these systems, yet the state has few institutional arrangements to enable local governments to manage and finance these systems. The UNC EFC facilitated a training session as part of a NCRCAP training program. The session examined the different interests and concerns of stakeholders and strategies for addressing these concerns.

Water and Wastewater Capital Finance Course. The UNC EFC worked with the UNC Institute of Government (the largest local government training program in

North Carolina) to develop and co-sponsor a comprehensive 2-day course on capital finance for local government utility, management, and finance officials. The course has become a regular offering of the Institute of Government, and attracts one of the most diverse groups of participants at the Institute, with equal representation of professionals from technical and financial fields. The course focuses equal attention on sources of capital finance and planning techniques.

Water and Wastewater Leadership Center. The UNC EFC was asked to develop and deliver a Utility Finance Module as part of a national water and wastewater leadership program run by the Kenan Flagler Business School on behalf of several national water and wastewater organizations including AWWA, AMSA, and AMWA. The module was designed to provide senior technical leaders with an overview of financial management topics and to encourage them to become more involved in the financial aspects of their operations.

Water and Wastewater Rate Setting. The North Carolina Section of the American Water Works Association and the Water Environment Association sponsor over a hundred training programs a year for water and wastewater utility professionals – almost all of these programs focus entirely on the technical or regulatory aspects of service provision. The UNC EFC worked with the association to expand its offerings related to finance and management topics. The UNC EFC assisted the association with designing and implementing a 1 day seminar on rate setting and revenues that now complements the organization’s more technical programs.

Financial Management Seminars for Utility Managers. The Florida Section of the AWWA similarly focuses on the more technical aspects of utility provision. The UNC EFC collaborated with the Florida Section in 2003 to offer several financial management seminars during statewide meetings and events.

Solid Waste Revenue Workshop. Over the last few years, the number of inquiries for financial planning assistance from solid waste programs has increased substantially. Solid waste finance issues include transitioning from tax supported programs to user fee supported programs; loss of tipping fee revenue as communities close landfills; and flow control issues. In order to help communities address these issues, the UNC EFC worked with several local governments to host an intensive one-day workshop for solid waste managers and attorneys from across North Carolina.

EPA Financial Capacity Workshop. The UNC EFC was asked by EPA to deliver a session on financial management to a group of technical assistance providers from Regions 4 and 6 at a capacity development workshop in Atlanta. The event provided

an excellent forum for the Technical Assistance (TA) providers (including the UNC EFC) to share their recent experiences and to exchange assistance strategies.

Community Development Academy. The UNC EFC was asked to deliver a presentation on water management financial issues to a group of community development professionals as part of the 2003 Community Development Academy. The Academy is held each year to educate local government planners and community organizations.

Municipal Enterprise Budgeting. Every year, the UNC School of Government provides a variety of financial management and accounting trainings to hundreds of local government finance and budgeting professionals. The UNC EFC has been asked to help integrate environmental management concepts into these courses. The UNC EFC developed a presentation on using municipal budgets effectively to encourage and monitor environmental management.

Direct Technical Assistance

The UNC EFC devoted a significant amount of resources in 2003 to providing direct support to practitioners throughout the Southeast. This technical assistance included email and phone consultations; management of listservs; site visits; and the publication of guides and updates on key issues. The table below shows a few examples of technical assistance activities carried out in 2003.

Community	Description
Town of Jacksonville	Advice on purchase of potentially contaminated property
Town of Yanceyville	Advice on issues in inter-jurisdictional water resources planning
Towns of Huntersville and Cornelius	Advice on municipal power to regulate activities on lake within towns and on rulemaking authority of Lake Norman Marine Commission
Orange County Solid Waste Department	Provide assistance evaluating revenue options to support community recycling program. Development of cost accounting, equipment reserve and cash flow models.

Polk County	Assistance on legal and financial implications of different solid waste financing options.
Orange County	Support effort to develop a state of the environment report.
Rutherford County	Comprehensive assistance with community source water protection. Facilitation of community meetings, support in risk assessment.
Harnett County	Assistance in considering utility merger options and opportunities.

Policy Analysis and Support

In addition to direct community outreach, the UNC EFC works with decision makers to assess the effectiveness of environmental finance policies at a regional or state level, and to improve those policies as a way of supporting local efforts.

Major policy efforts in 2003 included:

Assessing Drinking Water and Wastewater Infrastructure Funding in Appalachia. The UNC EFC was awarded a competitive contract to carry out a drinking water and sewer infrastructure needs assessment for the Appalachian Regional Commission (ARC). The project began in the fall of 2003 and will continue through 2004. The project includes developing quantitative estimates of water and sewer needs in the 13 state/410 County ARC region; preparing a detailed and quantitative catalog of public financial water and sewer assistance in the region; identifying and analyzing financial management and infrastructure financing strategies within the region, especially strategies likely to have an impact in distressed communities; and developing financial management case studies. The project will look at strategies implemented at the local level as well as statewide strategies implemented by funding agencies and state/regional agencies.

Assessment of Land Conservation Easement Options. The UNC EFC presented information on the costs and financing strategies for land conservation to the General Assembly's Environmental Review Commission. The UNC EFC drafted legislation (ultimately passed) that allows a landowner with conservation easements to maintain important tax advantages on their land by keeping the land in the present use value tax program despite its conservation status. In response to a request from the Clean

Water Management Trust Fund, the UNC EFC constructed a cash-flow model that explains the choice a landowner/farmer faces between a permanent easement and a 30-year contract under the state's conservation reserve enhancement program. All of these activities flowed out of earlier work on conservation, the Million Acres Initiative, and follow-up work on the One N.C. Naturally effort by the state Department of Environment and Natural Resources.

Collaborative Strategies for Land Trust Networks. The UNC EFC conducted a survey of funding organizations that have faced problems in joint fundraising with affiliated organizations. A report and options presentation was provided for North Carolina land trusts, who are under pressure from their major foundation funder to develop a joint fundraising strategy among the 23 separate land trusts.

Strategies for Developing State Land Conservation Program. Following the success of the Million Acres report, the UNC EFC continued to play a role in expanding and developing financing systems for land conservation efforts in North Carolina. For the Secretary of DENR, the UNC EFC facilitated a series of six planning workshops attended by approximately 400 participants (in Chapel Hill, Greensboro, Charlotte, Boone, Fayetteville and Wilmington) from a broad spectrum of organizations representing different land-use, economic development and environmental interests. The workshop series was the kick-off of a new initiative to prioritize and coordinate land acquisition and protection activities across North Carolina.

Analysis of Fiscal Capacity of Water and Wastewater Utilities. The financial health of a utility has a major impact on its ability to provide safe drinking water and environmentally sound wastewater treatment. The financial challenges facing the water industry as a whole have been well documented over the last few years with the release of a number of high profile "financial gap studies" by EPA and the Water Infrastructure Network. Data relating to the financial capacity of North Carolina Water and Sewer was collected from a variety of different sources including the Local Government Commission, Local Water Supply Plans, the US Census, and individual utilities. A database of financial capacity information was developed and analyzed to identify financial trends and potential issues likely to impact the future provision of safe water in the state. Financial indicators relating to utility revenues, the percentage of income devoted to water services, debt, and operating efficiency were calculated and compared across different groups of utilities organized by type of utility, size, services provided, and geographic region.

Administrative Obstacles to Establishing Energy Assistance Loans. The UNC EFC was contacted by officials from a bank that is interested in developing a

revolving loan program for local government energy conservation and efficiency initiatives. The loan program has reached a road block due to several key issues related to how the loans are secured and administered. The UNC EFC provided general assistance and research on potential methods of structuring the loan program that would take into consideration current legal and financial constraints.

Inventory and Assessment of DWSRF Loan Programs for Disadvantaged Communities. Individual states are given the authority to create programs that target “disadvantaged communities” as part of their Drinking Water State Revolving Fund (DWSRF). Several states in Region 4 have already established these programs and other states such as North Carolina have considered them. The states have a wide latitude in how to run the program and states have chosen to define disadvantaged communities differently and have put together different financial assistance structures. The UNC EFC prepared an inventory of these programs and their characteristics in Region 4. The inventory is designed to help states that do not have the programs evaluate potential options, and to provide states with the programs more knowledge about other possible types of programs.

Options for Addressing Agricultural Waste Disposal Challenges. The UNC EFC has agreed to join the advisory panel for review of alternative swine waste management systems under the Smithfield Foods-Premium Standard Farms Agreement with the N.C. Attorney General. A primary outcome of this effort is judging economic feasibility of various alternative waste technologies.

Proposals/Initiatives for 2004

Some activities currently planned for 2004 include:

Dissemination of Results of Appalachia Drinking Water and Wastewater Needs Assessment. The UNC EFC will present the findings from the ARC Study to practitioners at all levels of government. The UNC EFC anticipates holding roundtables and presentations in states throughout Region 4 to discuss how the results of the study can be used to improve infrastructure funding programs.

Financial Management Guide and Board Training. The UNC EFC has been awarded funding from the Southeast Regional Small Public Water Systems Technical Assistance Center (SETAC) to provide financial planning assistance to small water utilities. As part of this project, the UNC EFC will write a detailed water utility financial management guide that targets the individuals that sit on governing boards responsible for drinking water service. The guide will focus on the legal and financial obligations and expectations assigned to these boards under U.S. and North

Carolina law (many financial management and rate setting responsibilities are based on state law). The guide will serve as the basis for a statewide board training program.

Statewide Training Program for Municipal Officials. The UNC EFC will participate in a statewide training program sponsored by the NC League of Municipalities and the UNC School of Government to provide basic governance training to elected officials throughout the state. The UNC EFC is responsible for designing and delivering environmental finance sessions that will be delivered to over 700 local officials at 8 locations throughout the state.

Storm Water Ordinance. Subject to funding from the section 319 program, the UNC EFC will assist in development of a statewide model stormwater ordinance (for Phase II post-construction stormwater control and other purposes).

Models for Funding On-site Wastewater Systems. The UNC EFC will prepare an inventory of different local approaches used throughout North Carolina to fund the repair and replacement of failing septic systems.

EFC Network (EFCN) Collaborations

EFAB Affordability Work Group. The UNC EFC serves on the Environmental Finance Advisory Board's (EFAB) Affordability Work Group. The UNC EFC works with EFAB members and several other EFCs to provide advice and guidance on water affordability programs to local utilities and state and federal regulatory agencies.

EFAB Joint-Operations Work Group. The UNC EFC also serves on an EFAB group charged with investigating potential options for jointly managing and operating state administered revolving loan programs.

Funding Database. One of the roles of the UNC EFC and EFCN is to capture, distill and disseminate useful finance and policy resources to practitioners. As part of this effort, many EFCs have developed internet resource databases that allow users with specific interests to find information on different types of funding and technical assistance. During 2003, the UNC EFC worked with the Boise State EFC to replicate an internet based funding database. The UNC EFC modified a series of computer applications developed by Boise State so that it can be used by the UNC EFC to present information on environment funding sources in the southeast.

Source Water Protection. The UNC EFC was one of five EFCs that have provided community assistance in eight states as part of an EPA supported project to field test innovative strategies for identifying and addressing risks to drinking water sources. As part of this effort, the EFCs have compiled a “lessons learned” document to share with EPA and others working in this important area. As a result of the project, local communities have started implementing specific water protection measures, and key state and federal oversight bodies have reviewed and fine-tuned their coordination efforts. The Rutherford County effort spearheaded by UNC EFC was the first of the nine national pilot projects funded by EPA to produce and pass a multi-jurisdictional source water protection plan.

Collaboration with University of Southern Maine EFC. The Network’s newest EFC, the Maine EFC, has decided to expand the work they do in the area of water and wastewater financial management. The UNC EFC worked with the Maine EFC throughout the year to provide assistance and advice to help support their work. As part of the partnership, one of Maine’s EFC research associates completed a UNC EFC distance education course.

Presentations, Conferences and Meetings

In addition to the events mentioned above, the UNC EFC actively participated in a number of presentation and conferences throughout the year.

- Council of Infrastructure Funding Authorities Annual Conference
- American Water Works Association Annual Conference
- Environmental Finance Center Network/Environmental Advisory Board Meetings
- North Carolina Water Resources Research Institute Annual Workshop
- Environmental law for newly elected legislators. Presentation to newly elected State Legislators.
- Workshop on water rights sponsored by ZSR Foundation
- Municipal and county administration. Environmental presentation to group of municipal and county administrators.

- Source water protection presentation. Presentation to DC EPA staff on Source water protection efforts.
- Sustainability: How Would We Know If We Got There? Presentation to NC Bar Association
- Water law for city attorneys. Presentation during course for Municipal Attorneys
- Water law for new city attorneys. Presentation during course for new municipal attorneys.
- Water rights in NC: a history and overview. Presentation during AWWA seminar on water law.

Contact Information

For more information about the UNC EFC, see www.efc.unc.edu

Or call Jeff Hughes, center Director, at (919) 843-4956, or Lynn Weller, Program Manager, at (919) 966-4199.

For more information on the Environmental Finance Center network, see: www.epa.gov/efin.